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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,634	01/27/2004	Robert W. Helt	TIR 2748, 2837	2260
7590	04/14/2008		EXAMINER	
MICHAEL E. MARTIN THE TRANE COMPANY PATENT DEPT. 12-1 3600 PAMMEL CREEK ROAD LA CROSSE, WI 54601				JIANG, CHEN WEN
ART UNIT		PAPER NUMBER		
3744				
MAIL DATE		DELIVERY MODE		
04/14/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/765,634	HELT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Chen-Wen Jiang	3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 07 December 2007.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-11 and 13-28 is/are pending in the application.  
 4a) Of the above claim(s) 23-25 is/are withdrawn from consideration.  
 5) Claim(s) 16,17,21 and 26-28 is/are allowed.  
 6) Claim(s) 1,2,7-11,13 and 20 is/are rejected.  
 7) Claim(s) 3-6,14,15,18,19 and 22 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 27 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. The remarks (12/7/2007) presented by the applicant have been duly noted. However, an update search and further review of the prior art of record has prompted the presentation of new rejections presented below. In view of such, the previous rejections in the office action have been withdrawn. Examiner apologizes the inconsistence and confusion in the Office Action mailed 4/12/2007.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,2 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Morgan (U.S. Patent Number 6,394,359).

In regard to claims 1,2,10, Morgan discloses a remote control thermostat to control a thermostat. The system comprises a base thermostat 10 with ambient temperature readout 70, transceiver 55 and setpoint readout 80, a remote thermostat 15 with remote readout display 135 and transceiver 145, base thermostat controller 35 and remote thermostat controller 100. The various settings of the base unit 10 (as shown in FIG. 3) are transmitted to the remote control unit 15 with the aid of a remote unit transceiver module 145 and a remote unit antenna 150. Likewise, the various control metrics as issued by the remote control unit 15 are transmitted to the base unit 10 (as shown in FIG. 3) as well by the remote unit transceiver module 145 and

remote unit antenna 150 (col.6, lines 31-37). The remote readout 135 displays either base thermostat temperature, remote thermostat temperature or setpoint temperature. Base unit 10 is designed so that it can receive an instructional RF signal from any remote control unit 15 utilizing the same carrier frequency. In this fashion, many remote control units 15 can be purchased to operate a single base unit 10. One can purchase many remote control units 15 and put them in any room in the structure for remote operation of base unit 10. The remote controls will receive setpoint from base thermostat's setting and the base thermostat's setting is controlled either by base thermostat or remote thermostats. Therefore, a changing of temperature setpoint at any one of the thermostats will change the temperature setpoint of all of the thermostats.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U.S. Patent Number 6,394,359) in view of Dushane et al. (U.S. Patent Number 5,348,078).

Morgan discloses the invention substantially as claimed. However, Morgan does not disclose Daylight Savings Time switch actuator. Dushane discloses multiple thermostats with at least one including a time display, a Daylight Savings Time icon, and a Daylight Savings Time switch actuator capable of adjusting the time during Daylight Savings time periods (Figure 12a and column 11 lines 33-35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Morgan with a Daylight Savings Time switch actuator in view of Dushane so as to make convenience for user to adjust time according the daylight savings changes.

6. Claims 8,9,11,13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U.S. Patent Number 6,394,359) in view of Osann (US 2003/0050737).

Morgan discloses a remote control thermostat to control a thermostat. The system comprises a base thermostat 10 with ambient temperature readout 70, transceiver 55 and setpoint readout 80, a remote thermostat 15 with remote readout display 135 and transceiver 145, base thermostat controller 35 and remote thermostat controller 100. The various settings of the base unit 10 (as shown in FIG. 3) are transmitted to the remote control unit 15 with the aid of a remote unit transceiver module 145 and a remote unit antenna 150. Likewise, the various control metrics as issued by the remote control unit 15 are transmitted to the base unit 10 (as shown in FIG. 3) as well by the remote unit transceiver module 145 and remote unit antenna 150 (col.6, lines 31-37). The remote readout 135 displays either base thermostat temperature, remote thermostat temperature or setpoint temperature. Base unit 10 is designed so that it can receive an instructional RF signal from any remote control unit 15 utilizing the same carrier frequency. In this fashion, many remote control units 15 can be purchased to operate a single base unit 10. One

can purchase many remote control units 15 and put them in any room in the structure for remote operation of base unit 10. The remote controls will receive setpoint from base thermostat's setting and the base thermostat's setting is controlled either by base thermostat or remote thermostats. Therefore, a changing of temperature setpoint at any one of the thermostats will change the temperature setpoint of all of the thermostats. Morgan discloses the invention substantially as claimed. However, Morgan does not disclose using average temperature and clock in the system. Osann discloses the thermostat can compute an average temperature over all of the offices and control the heating/cooling system to reach an overall compromise of temperatures [135] and can have clock (Fig.12a). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Morgan with an average temperature selection and clock in view of Osann so as to avoid extreme temperature readings and view clock time.

7. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Longtin (U.S. Patent Number 5,566,879).

Longtin discloses a system for controlling plurality temperature regulating devices. The temperature regulating device comprises at least one primary thermostat and a predetermined number of a secondary thermostat. The primary and secondary thermostat are adapted to communicate with each other by means of commands sent through their own microprocessor means, and wherein the central control means send or receive commands to and from the temperature regulating device by means of high frequency signals applied to the power lines (col.3, lines 8-19). It is possible to install more then one primary thermostat per house. The only difference with the secondary thermostats is that the primary thermostat can SET at a single

point in the house the temperature of every room (col.11, lines 43-50). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to install primary thermostat in every room in order to be able to SET the temperature of every room in the house.

8. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Longtin (U.S. Patent Number 5,566,879) in view of Osann (US 2003/0050737).

Longtin discloses a system for controlling plurality temperature regulating devices. The temperature regulating device comprises at least one primary thermostat and a predetermined number of a secondary thermostat. The primary and secondary thermostat are adapted to communicate with each other by means of commands sent through their own microprocessor means, and wherein the central control means send or receive commands to and from the temperature regulating device by means of high frequency signals applied to the power lines (col.3, lines 8-19). It is possible to install more then one primary thermostat per house. The only difference with the secondary thermostats is that the primary thermostat can SET at a single point in the house the temperature of every room (col.11, lines 43-50). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to install primary thermostat in every room in order to be able to SET the temperature of every room in the house. However, Longtin does not disclose using average temperature in the system. Osann discloses the thermostat can compute an average temperature over all of the offices and control the heating/cooling system to reach an overall compromise of temperatures [135]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was

made to modify the apparatus of Longtin with an average temperature selection in view of Osann so as to avoid extreme temperature readings.

***Allowable Subject Matter***

9. Claims 16,17,21 and 26-28 are allowed.
10. Claims 3-6,14,15,18,19 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (571) 272-4809. The examiner can normally be reached on Monday-Thursday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Chen-Wen Jiang/  
Primary Examiner, Art Unit 3744